ASPIRE Obstetric Anesthesia Subcommittee Meeting

May 5, 2021

Agenda

- Announcements

- February 2021 Meeting recap

- BP 04 (Hypotension during Cesarean Delivery) data review

- GA 01 (General Anesthesia for Cesarean Delivery) data review

- Existing measure modification vs new measure development
  - Normothermia
  - PONV

Announcements

- Remaining 2021 Meeting Dates
  - August 4th, 1pm EST
  - November 3rd, 1pm EST

- GA 01 and BP 04 are now available on your dashboards

OB Dashboard on MPOG QI Reporting Tool

- OB Dashboard - Please reach out with any feedback!

- Steps to access OB Departmental Dashboard
  - Change 'Entity' in upper left corner to your institution
    - The default view when logging in from Provider Feedback Emails is your own performance on your sites' selected measures
  - Choose 'Dashboards', then 'Obstetric' from banner along the top
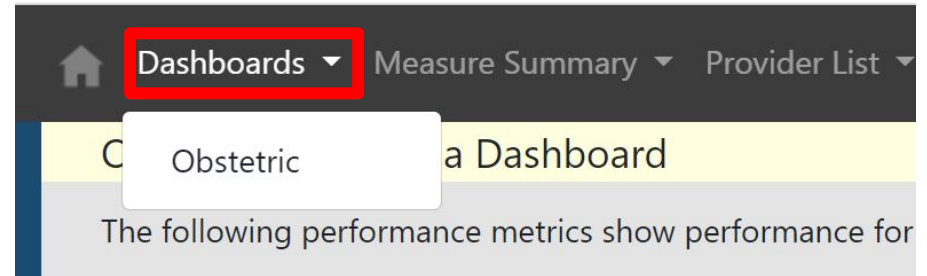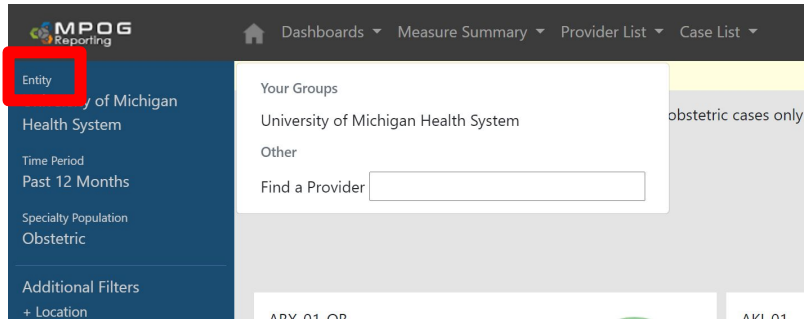
February Meeting Recap

- GA 01 Measure review

  - Now available on the OB Dashboard

  - Platelet information added to the Measure Case Report tool to assist in case review per request from the committee. Helps identify patients in which neuraxial anesthesia may be contraindicated

  - Determining the cause for general anesthesia will need to be completed at the local level through case review due to limitations with EHR documentation

  - Standardization of this documentation in the EHR is a possible area for development in order to capture the data within the measure

- Areas of interest for future development: Normothermia and PONV in cesarean deliveries

OB Anesthesia Type Phenotype

- We are continuing to refine the OB Anesthesia Type Phenotype to find and label "Cesarean Hysterectomies" (current state is only finding a subset of them)

- Question: If a patient has a cesarean delivery case followed by a separate hysterectomy case, should the second case still be considered a "cesarean hysterectomy" by the phenotype?
    – At what time frame after the initial case would the second case be considered just a "hysterectomy"? 24 hours? 48 hours?
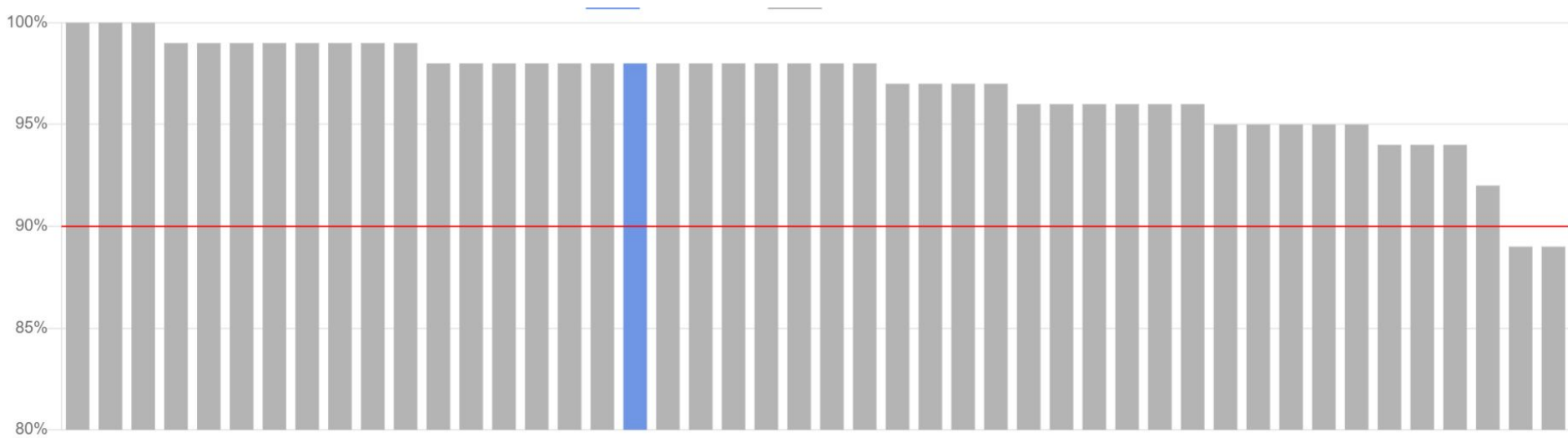
Measure Review

BP 04 and GA 01

BP 04

- Hypotension (SBP <90) during cesarean delivery between neuraxial start and neonate delivered
- BP 04 Measure review
  - Generally high performance across MPOG sites
  - Measure duration (neuraxial start to neonate delivered) on most cases is between 25 and 46 minutes, with an average of 33 minutes

GA 01

- Percentage of cesarean delivery cases where general anesthesia was used
- Note: Outlier site with >30% is a known data issue being resolved
  - Unable to capture reason for GA in MPOG Data due to limitations with EHR data
  - Will require review at the local level
  - Number of cases per month per site is small (around 0-10 cases)
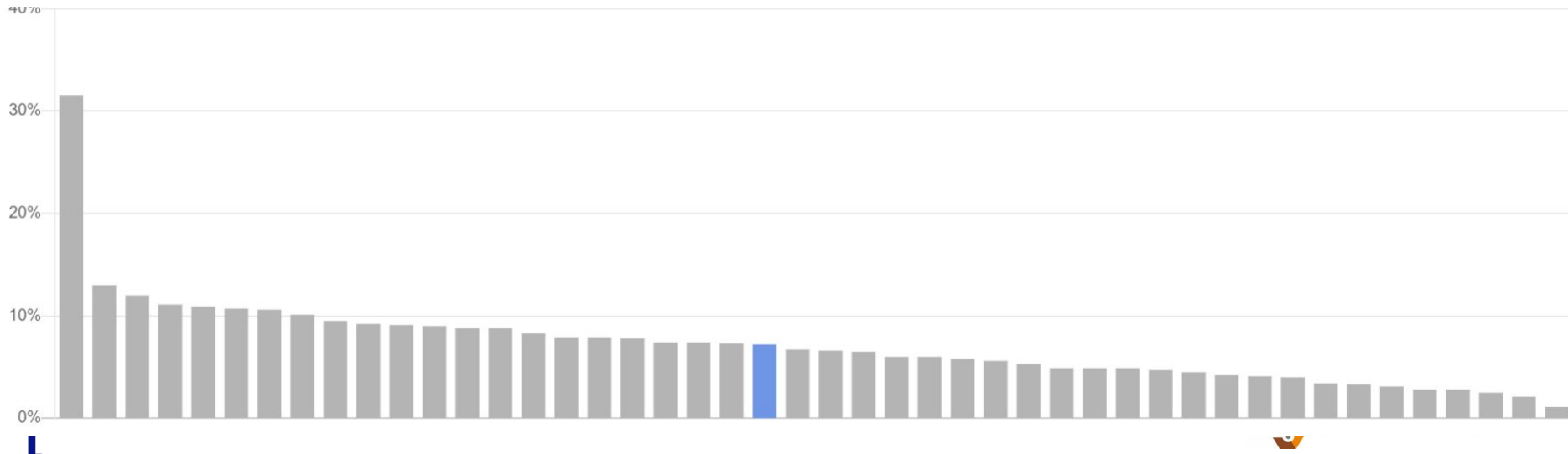
BP 04 and GA 01

- Please review BP 04 and GA 01 on your OB Dashboards
- Review of passed/flagged/excluded cases on the case list will help to identify trends
  - Are cases being under or over excluded?
  - Are there case types being excluded that should be included? Or vice versa?
- Please reach out to the coordinating center with any questions or suggestions after reviewing the data

Future Planning

Cesarean Delivery Case Volume by MPOG Site - 1 year (2020 - 2021)
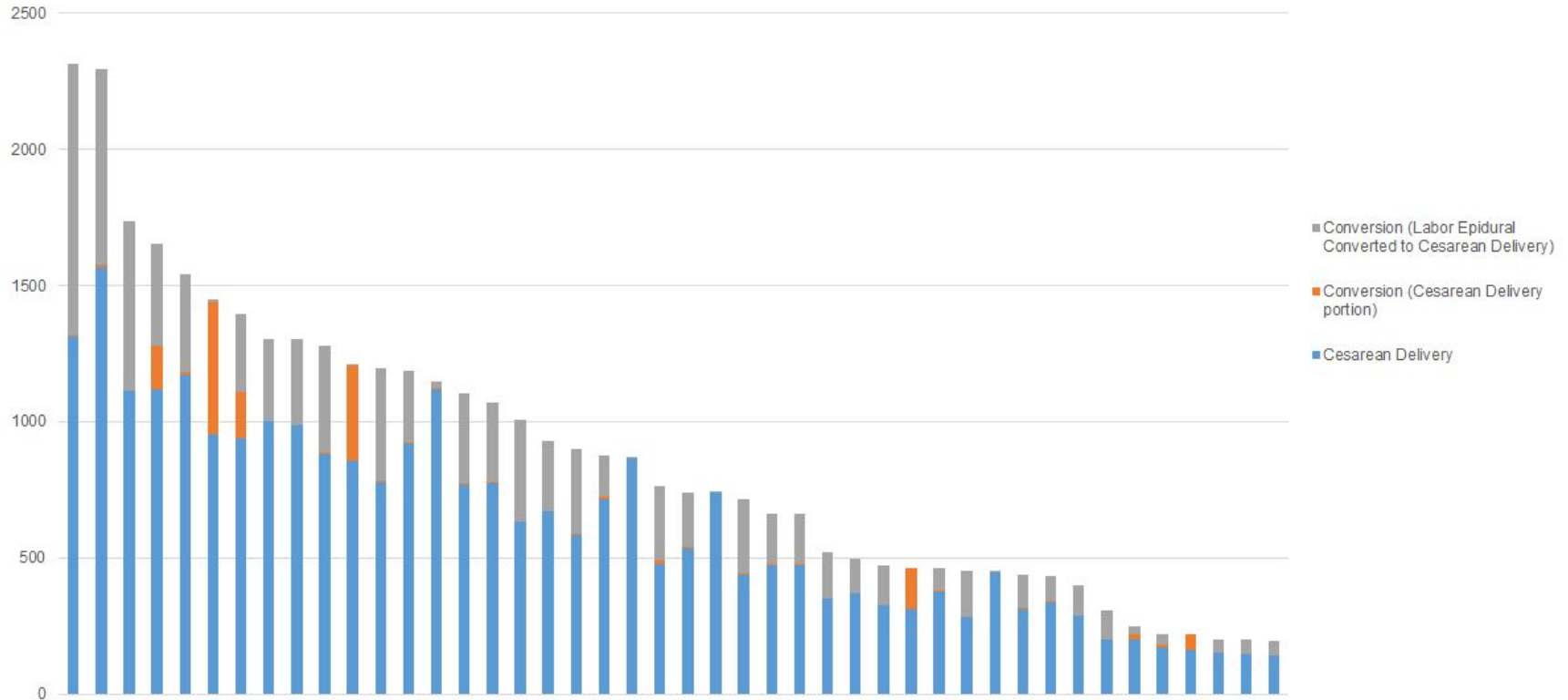
PONV and Normothermia in Cesarean Deliveries

- MPOG currently has PONV measures:
  - PONV 01- PONV Prophylaxis in high risk patients
  - PONV 03 - PONV or antiemetic administered in PACU
  - PONV 03b - PONV in PACU
- Three normothermia measures exist:
  - TEMP 01 - Active Warming Used
  - TEMP 02- Core Temperature Monitoring
  - TEMP 03 - Perioperative Hypothermia

- Discussion points:
  - Do these measures meet desired requirements for measurements in cesarean deliveries?
  - Should these measures be modified to better fit the OB population?
  - Should a new measure or measures replace these for use in OB?

Normothermia Measures

SOAP ERAC Guidelines for Normothermia (Class I, Level C, Low-Grade Level of Evidence)

- Benefits: Reduced SSI risk, shorter LOS, improved neonatal umbilical artery pH and APGAR scores
- Active warming = decreased hypothermia and perioperative shivering
- Preferred methods of facilitating maternal-neonatal warming in cesarean delivery
    - Preoperative patient warming
    - Intraoperative fluid warmer
    - Intraoperative forced air warming
    - OR room temp >72 F (23C)

Bollag L, Lim G, Sultan P, Habib AS, Landau R, Zakowski M, Tiouririne M, Bhambhani S, Carvalho B. Society for Obstetric Anesthesia and Perinatology: Consensus Statement and Recommendations for Enhanced Recovery After Cesarean. Anesth Analg. 2021 May 1;132(5):1362-1377. doi: 10.1213/ANE.0000000000005257. PMID: 33177330.

Current Measure: TEMP 01

- Percentage of cases where active warming was administered by the anesthesia provider.

- Inclusion: Cesarean deliveries (general or neuraxial anesthesia)

- Exclusion: Labor epidurals

- Success: Cases with documentation of an active warming device applied **OR** cases with at least one temperature greater than or equal to 36.0°C within the 30 minutes before case end.

- For cesarean deliveries, fluid warmers are considered an active warming device

TEMP 01 filtered to Cesarean Delivery Cases
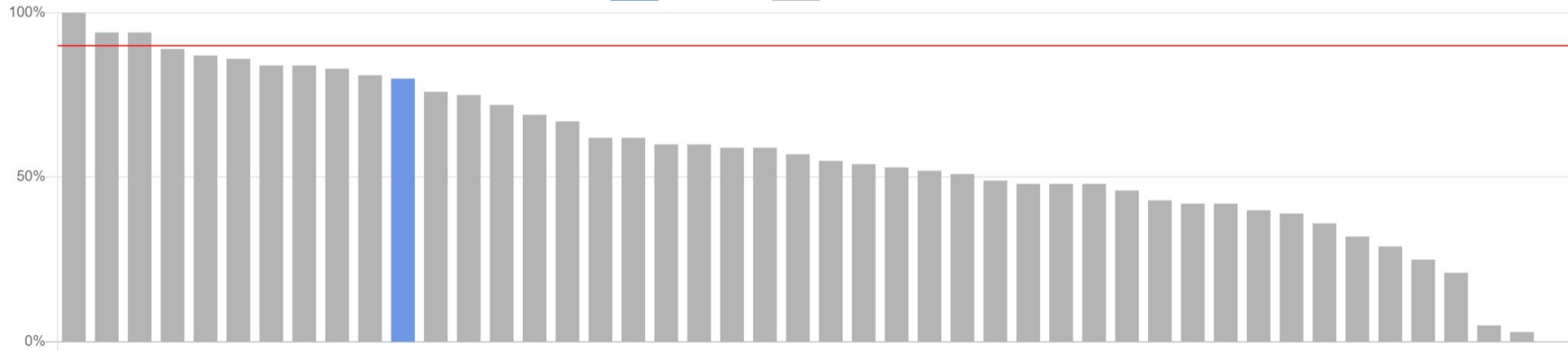
TEMP 01

- Available on the OB dashboard

- Keep as is, modify for OB, or exclude OB patients?

  - Please note: For cesarean deliveries, fluid warmers are considered an active warming device

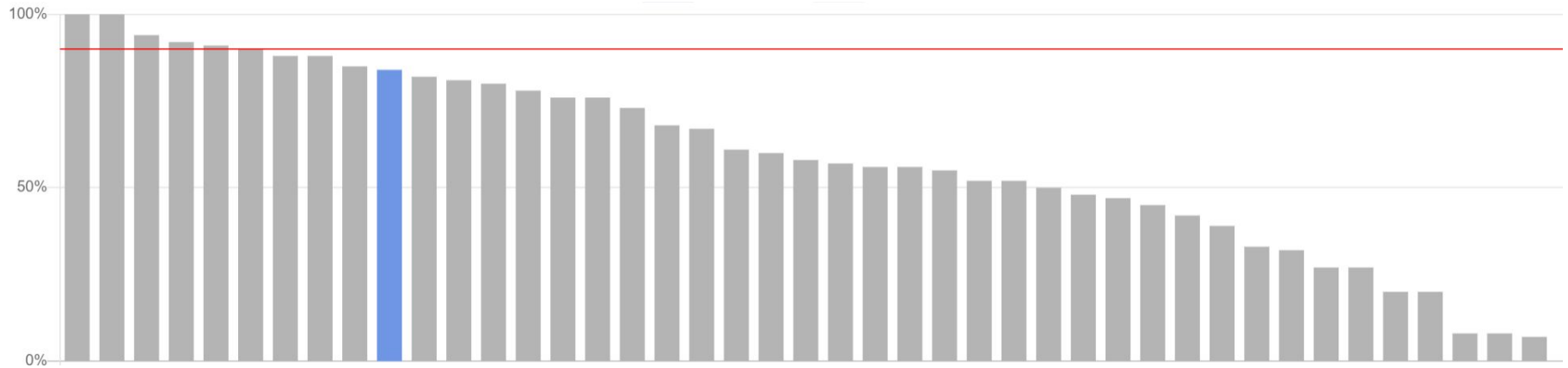- New measure development needed for active warming in cesarean deliveries?

Current Measure: TEMP 02 (Core Temperature Monitoring)

- Percentage of cases with increased risk of hypothermia that the anesthesia provider documented at least **one core temperature** intraoperatively for any patient receiving a general anesthetic.

- Inclusion: Cesarean deliveries **with general anesthesia only**

- Exclusion: Labor epidurals

- Success: Cases with at least one core or near core temperature documented between Anesthesia Start and Patient out of Room. If not available then, Anesthesia End.
  - Pulmonary Artery Temperature
  - Distal Esophageal Temperature
  - Nasopharyngeal Temperature
  - Tympanic Membrane Temperature
  - Bladder Temperature
  - Zero-Flux Thermometer Temperature
  - Oral Temperature
  - Axillary Temperature (arm must be at patient side)
  - Rectal Temperature

TEMP 02 filtered to Cesarean Deliveries (GA only)

- Includes cesarean deliveries with **general anesthesia only**

TEMP 02 (Core Temperature Monitoring)

- Available on the OB dashboard

- Keep as is, modify for OB, or exclude OB patients?

- New measure development needed for temperature monitoring in cesarean deliveries?

Current Measure: TEMP 03 (Hypothermia)

- Percentage of patients, regardless of age, who undergo surgical or therapeutic procedures under general or neuraxial anesthesia of **60 minutes duration or longer** for whom at least one body temperature was less than or equal to 36 degrees Celsius (or 96.8 degrees Fahrenheit) recorded within the **30 minutes immediately before or the 15 minutes immediately after** anesthesia end time

- Included: Cesarean deliveries **>60 minutes**

- Excluded: Labor epidurals, **cesarean deliveries marked as emergent, cases less than 60 mins**

TEMP 03 Filtered to Cesarean Deliveries (>60 minutes)

- Expressed as an inverse measure, lower is better
- Includes cesarean deliveries with **durations >60 minutes**

- Excludes **cesarean deliveries marked as emergent**
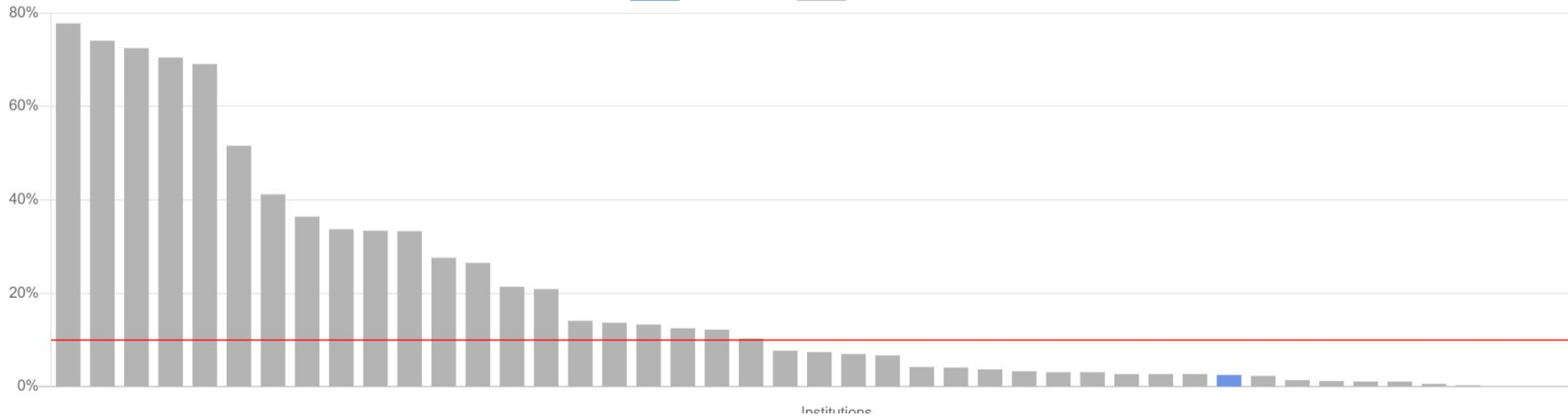
TEMP 03 OB Case Counts - Past 12 Months

Current TEMP 03 Case Breakdown (Cesarean Delivery Cases Only)

Large percentage of cesarean delivery cases are being excluded (gray) in the current TEMP 03 measure
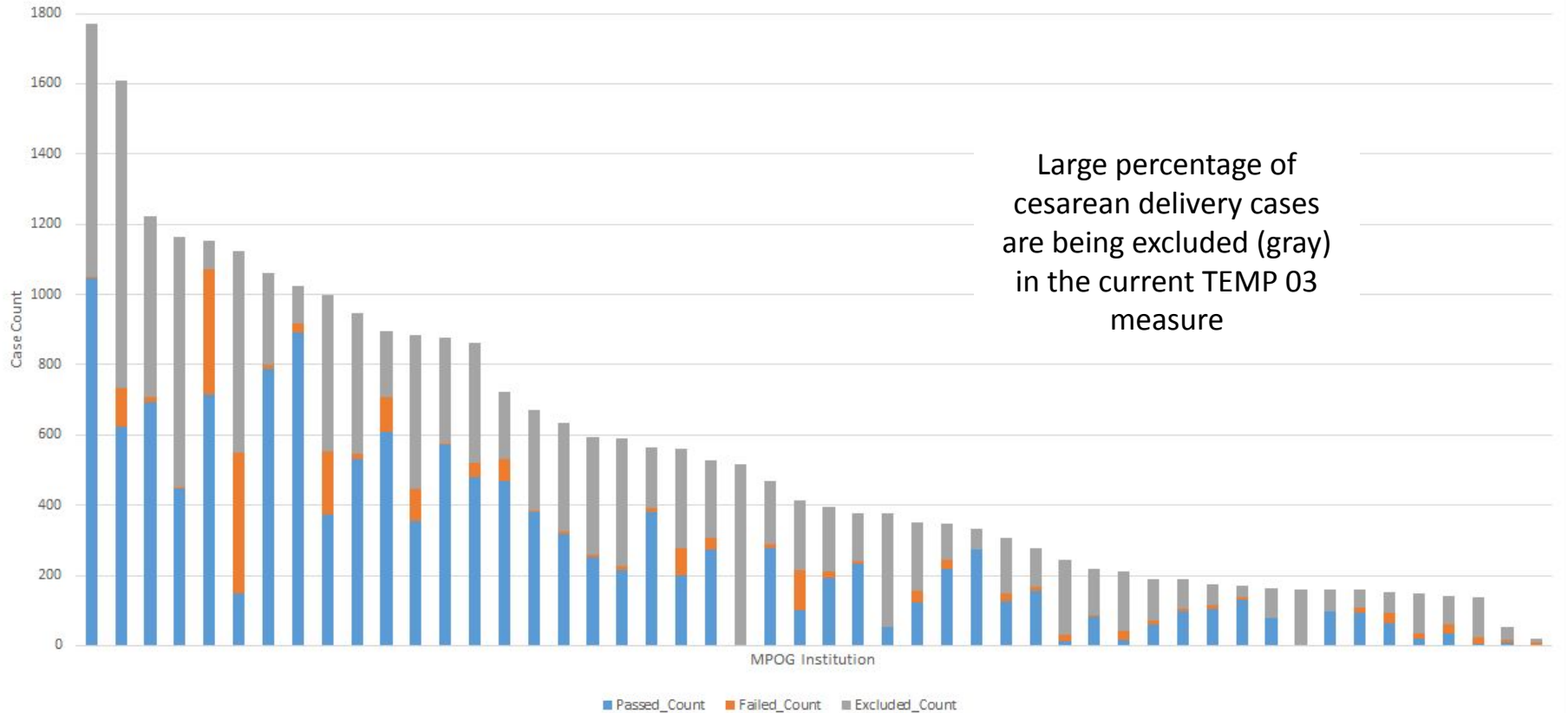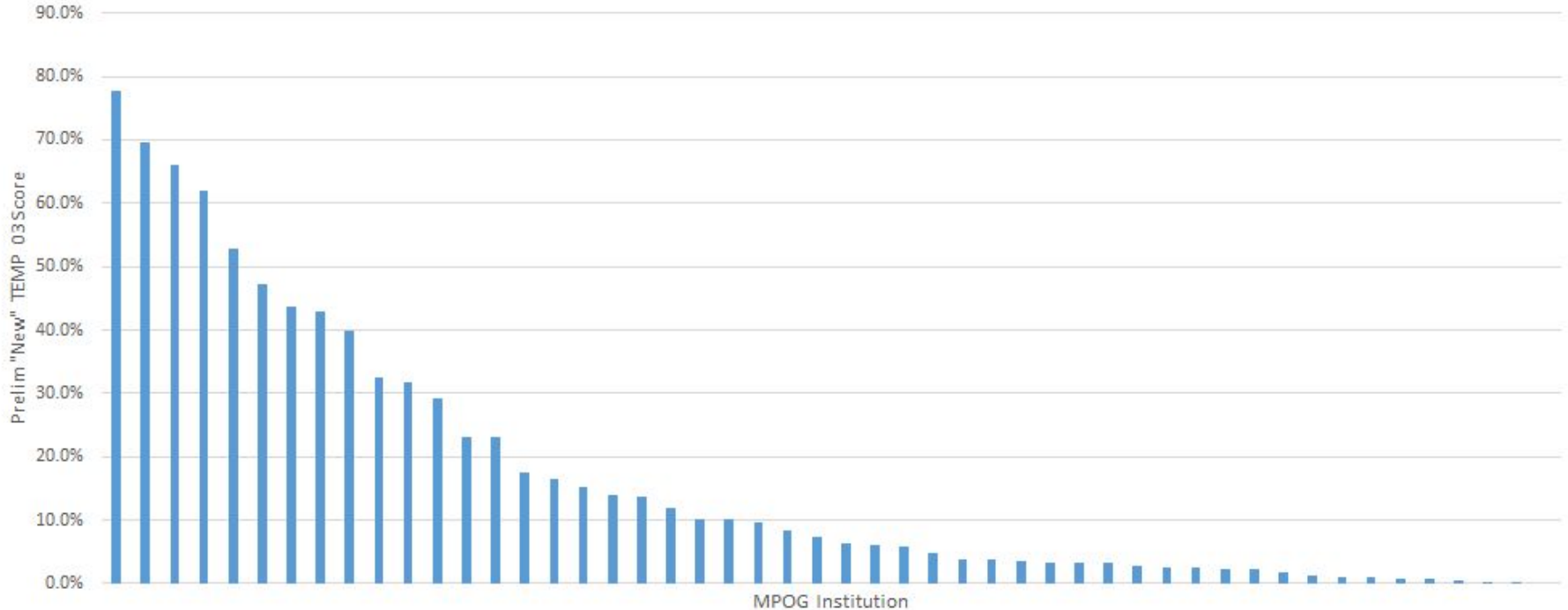
Potential Modification to TEMP 03 - No Time Exclusion

TEMP 03 Result Breakdown with no time exclusion (Cesarean Delivery Cases Only)
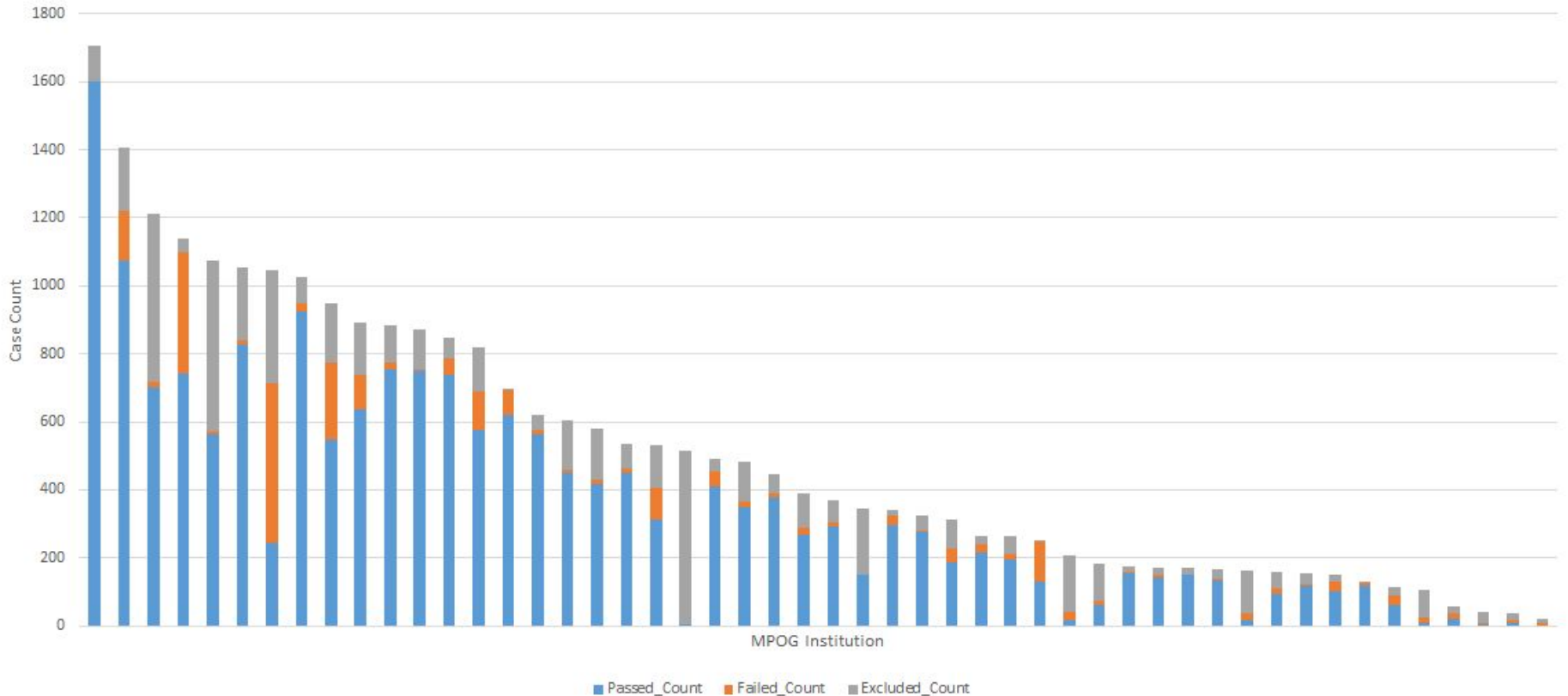
Potential Modification to TEMP 03 - No Time Exclusion

Prelim "New" TEMP 03 Score for Cesarean Deliveries Only with No Time Exclusion

Normothermia Modifications

- Further modifications needed to TEMP 01/02/03?

- New measure development vs modifications to TEMP 03 for OB population?

MPOG

Bonus Section: PONV

Current Measure: PONV 01

- Percentage of patients, aged 18 years and older, who undergo a procedure under an **inhalational general anesthetic**, AND who have **three or more risk factors** for post-operative nausea and vomiting (PONV), who receive combination therapy consisting of at least two prophylactic pharmacologic antiemetic agents of different classes preoperatively or intraoperatively.

- Includes: Cesarean deliveries who received **inhalational general anesthetic**

- Excludes: Labor epidurals

- Considered risk factors:
  - Female gender
  - History of PONV
  - History of motion sickness
  - Non-smoker
  - Intended administration of opioids for post-operative analgesia.

PONV 01 Filtered to Cesarean Deliveries

- Note: Only includes patients given **inhalational general anesthetic**
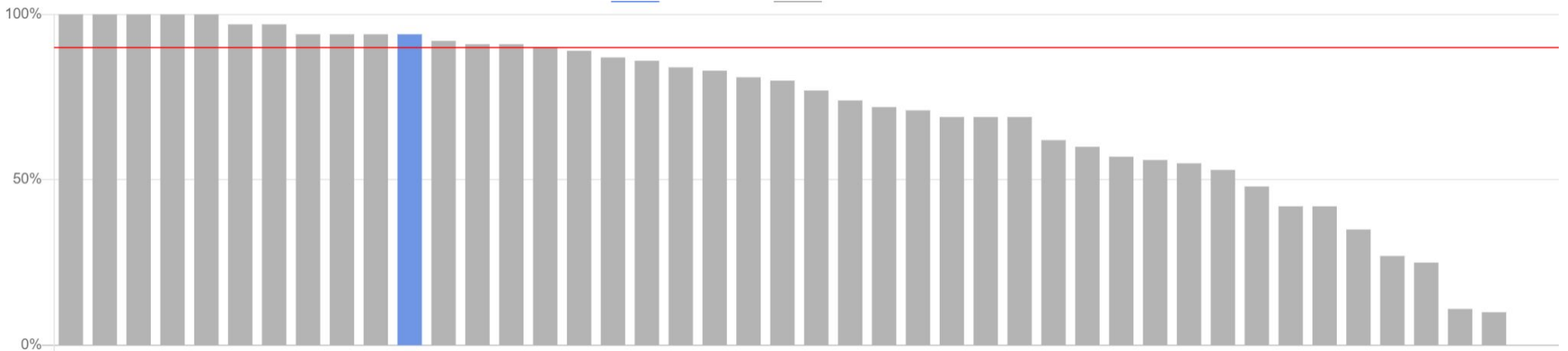
Postoperative Nausea and Vomiting Measures

- There is no risk score for postoperative nausea and/or vomiting (PONV) in parturients.
- Assessed potential parturient and peri-operative risk factors for PONV.
- Non-smoking, history of PONV after cesarean and/or morning sickness increase risk
- All factors were included in an obstetric-specific risk score (Duke score)
- Both Duke and Apfel risk scores performed poorly in prediction of PONV.

PONV 01 Modifications vs New Measure

- Risk factors for PONV in cesarean deliveries?

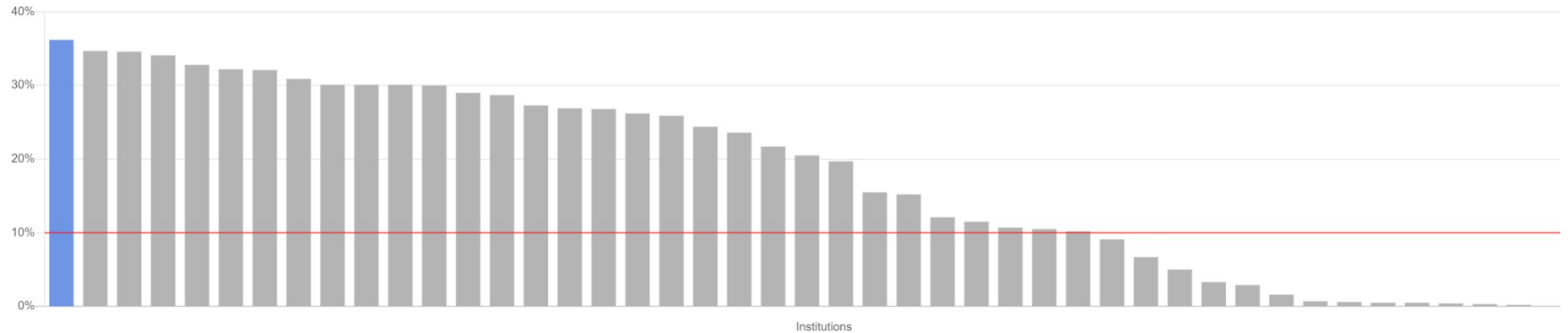- Modify to include spinal/neuraxial anesthesia for cesarean deliveries?

Current Measure: PONV 03

- Percentage of patients, regardless of age, who undergo a procedure and have a documented nausea/emesis occurrence OR receive a rescue antiemetic in the immediate postoperative period

- Time period: Recovery room in through 6 hours after Anesthesia End

- Inclusion: Cesarean Deliveries

- Exclusion: Labor Epidurals

PONV 03 Filtered to Cesarean Deliveries

- Success: Patient does not report nausea, have an emesis event or receive an antiemetic during the immediate postoperative period.

- Displayed as an inverse measure: lower is better

Current Measure: PONV 03b

- Percentage of patients, regardless of age who undergo a procedure **and have a documented nausea/emesis occurrence** with or without receiving an antiemetic in the immediate postoperative period.

- Time period: Recovery room in through 6 hours after Anesthesia End

- Inclusion: Cesarean Deliveries

- Exclusion: Labor Epidurals

PONV 03 B Filtered to Cesarean Deliveries

- Success: Patient does not report nausea or have an emesis event during the immediate postoperative period.

- Displayed as an inverse measure: lower is better

PONV 03 and PONV 03b

- Both are already available on the OB Dashboard displayed as filtered to OB

- Recommended modifications for OB?

THANK YOU!

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